

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-51. (cancelled)

52. (previously presented) A method comprising:

(a) providing contact between an aqueous solution containing one or more metal anion complexes and an organic solution including a diquaternary amine, wherein the diquaternary amine has two diquaternary nitrogens spaced at a distance of less than about 10 Å;

(b) selectively binding at least one of the one or more metal anion complexes to the diquaternary amine;

(c) separating the organic solution from the aqueous solution, wherein the diquaternary amines having the selectively bound metal anions are concentrated in the organic solution and the balance of the one or more metal anion complexes are concentrated in the aqueous solution; and

(d) back-extracting the selectively bound metal anions from the diquaternary amines into an aqueous acid.

53. (cancelled)

54. (previously presented) The method of claim 52, further comprising:

(e) separating an organic diquat solution from the aqueous acid containing the one or more metal anion complex.

55. (currently amended) The method of claim 54, further comprising:

(f) reusing the organic diquat solution separated by step (e) in step (a)

56. (currently amended) The method of claim 54, further comprising:

(f) reusing the aqueous acid separated by step (e) in step (d).

57. (currently amended) The method of claim 54, further comprising:
(f) separating the one or more metal anion complexes from the solution.
58. (currently amended) The method of claim 57, wherein the step of separating the one or more metal anion complexes includes electrodeposition onto an electrode.